



Substitute for form 1449/PTO

**FIRST SUPPLEMENTAL  
INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
(Use as many sheets as necessary)

Sheet 1 of 2

**Complete if Known**

|                        |                                    |
|------------------------|------------------------------------|
| Application Number     | 10/782,664                         |
| Filing Date            | February 18, 2004                  |
| First Named Inventor   | MONTERO-JULIAN, Felix A.           |
| Art Unit               | 1644                               |
| Examiner Name          | DIBRINO, Marianne                  |
| Attorney Docket Number | 2512.0210001/KWM/C-K<br>(2052-183) |

**U.S. PATENT DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | Document Number                          | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages<br>or Relevant Figures Appear |
|--------------------|-----------------------|--|--------------------------------|--|---|
|                    |                       | Number-Kind Code <sup>2</sup> (if known) |                                |  |   |
|                    | US1                   | 4,017,597                                | 04/12/1977                     | Reynolds   |   |
|                    | US2                   | 4,208,479                                | 06/17/1980                     | Zuk <i>et al.</i>                                  |   |
|                    | US3                   | 4,912,030                                | 03/27/1990                     | Weiss <i>et al.</i>                                |   |
|                    | US4                   | 5,187,065                                | 02/16/1993                     | Schutzer   |   |
|                    | US5                   | 5,514,557                                | 05/07/1996                     | Moghaddam  |   |
|                    | US6                   | 5,534,416                                | 07/09/1996                     | Millard <i>et al.</i>                              |   |
|                    | US7                   | 5,583,031                                | 12/10/1996                     | Stern  |   |
|                    | US8                   | 5,599,720                                | 02/04/1997                     | Ekins  |   |
|                    | US9                   | 5,759,774                                | 06/02/1998                     | Hackett <i>et al.</i>                              |   |
|                    | US10                  | 5,919,639                                | 07/06/1999                     | Humphreys <i>et al.</i>                            |   |
|                    | US11                  | 5,956,532                                | 09/21/1999                     | Arita  |   |
|                    | US12                  | 6,046,013                                | 04/04/2000                     | Tidey <i>et al.</i>                                |   |
|                    | US13                  | 6,143,517                                | 11/07/2000                     | Young  |   |
|                    | US14                  | 6,225,042                                | 05/01/2001                     | Cai <i>et al.</i>                                  |   |
|                    | US15                  | 6,270,772                                | 08/07/2001                     | Burrows <i>et al.</i>                              |   |
|                    | US16                  | 6,355,479                                | 03/12/2002                     | Webb <i>et al.</i>                                 |   |
|                    | US17                  | 6,419,931                                | 07/16/2002                     | Vitiello <i>et al.</i>                             |   |
|                    | US18                  | 6,485,913                                | 11/26/2002                     | Becker <i>et al.</i>                               |   |
|                    | US19                  | 6,727,093                                | 04/27/2004                     | Diamond  |   |
|                    | US20                  | 2002/0006903 A1                          | 01/17/2002                     | Schneck <i>et al.</i>                              |   |

**FOREIGN PATENT DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | Foreign Patent Document   | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document               | Pages, Columns, Lines,<br>Where Relevant Passages<br>or Relevant Figures Appear | T <sup>6</sup> |
|--------------------|-----------------------|---|--------------------------------|--|---|----------------|
|                    |                       | Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known) |                                |  |   |                |
|                    | FP1                   | WO 92/07952 A1  | 05/14/1992                     | Immologic Pharma. Corp.;<br>Merck & Co., Inc.                    |   |                |
|                    | FP2                   | WO 94/11738 A1  | 05/26/1994                     | Max-Planck-Gesellschaft zur<br>Förderung der Wissenschaften E.V. |   |                |
|                    | FP3                   | WO 95/04817 A1  | 02/16/1995                     | Cytel Corporation  |   |                |
|                    | FP4                   | WO 97/00067 A1  | 01/03/1997                     | University of Victoria   |   |                |
|                    | FP5                   | WO 97/04085 A1  | July 15, 1996                  | Boehringer Mannheim GmbH   |   |                |
|                    | FP6                   | WO 97/09429 A2  | 03/13/1997                     | Corixa Corporation   |   |                |
|                    | FP7                   | WO 98/23690 A1  | 06/04/1998                     | Eastman Chemical Co.   |   |                |

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

|   |  |  |  |                          |                                    |
|---|--|--|--|--------------------------|------------------------------------|
| Substitute for form 1449/PTO<br><br><b>FIRST SUPPLEMENTAL<br/>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br><i>(Use as many sheets as necessary)</i> |  |  |  | <b>Complete if Known</b> |                                    |
|   |  |  |  | Application Number       | 10/782,664                         |
| Sheet    2    of    2   |  |  |  | Filing Date              | February 18, 2004                  |
|   |  |  |  | First Named Inventor     | MONTERO-JULIAN, Felix A.           |
|   |  |  |  | Art Unit                 | 1644                               |
|   |  |  |  | Examiner Name            | DIBRINO, Marianne                  |
|   |  |  |  | Attorney Docket Number   | 2512.0210001/KWM/C-K<br>(2052-183) |

| U.S. PATENT DOCUMENTS |                       |  |                                |  |   |
|-----------------------|-----------------------|--|--------------------------------|--|---|
| Examiner Initials*    | Cite No. <sup>1</sup> | Document Number                          | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages<br>or Relevant Figures Appear |
|                       |                       | Number-Kind Code <sup>2</sup> (if known) |                                |  |   |
|                       | US21                  | 2002/0106708 A1                          | 08/08/2002                     | Thomas <i>et al.</i>                               |   |
|                       | US22                  | 2003/0044415 A1                          | 03/06/2003                     | Savage   |   |
|                       | US23                  | 2003/0124513 A1                          | 07/03/2003                     | McSwiggen  |   |
|                       | US24                  | 2003/0166057 A1                          | 09/04/2003                     | Hildebrand <i>et al.</i>                           |   |
|                       | US25                  | 2003/0191286 A1                          | 10/09/2003                     | Hildebrand <i>et al.</i>                           |   |
|                       | US26                  | 2003/0044389 A1                          | 03/06/2003                     | Brown <i>et al.</i>                                |   |
|                       | US27                  | 2004/0072262 A1                          | 04/15/2004                     | Montero-Julian <i>et al.</i>                       |   |
|                       | US28                  | 2004/0137537 A1                          | 07/15/2004                     | Montero-Julian <i>et al.</i>                       |   |
|                       | US29                  | 2004/0253632 A1                          | 12/16/2004                     | Rhode <i>et al.</i>                                |   |
|                       | US30                  | 2005/0059107 A1                          | 03/17/2005                     | Maillere <i>et al.</i>                             |   |
|                       | US31                  | 2005/0287611 A1                          | 12/29/2005                     | Nugent <i>et al.</i>                               |   |
|                       | US32                  | 2006/0040332 A1                          | 02/23/2006                     | Maeurer  |   |
|                       |                       |  |                                |  |   |
|                       |                       |  |                                |  |   |
|                       |                       |  |                                |  |   |
|                       |                       |  |                                |  |   |
|                       |                       |  |                                |  |   |
|                       |                       |  |                                |  |   |
|                       |                       |  |                                |  |   |
|                       |                       |  |                                |  |   |

| FOREIGN PATENT DOCUMENTS |                       |  |                                |  |  |                |
|--------------------------|-----------------------|--|--------------------------------|--|--|----------------|
| Examiner Initials*       | Cite No. <sup>1</sup> | Foreign Patent Document  | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document                       | Pages, Columns,<br>Lines, Where<br>Relevant<br>Passages or<br>Relevant Figures<br>Appear | T <sup>6</sup> |
|                          |                       | Country Code <sup>2</sup> Number <sup>3</sup><br>Kind Code <sup>4</sup> (if known) |                                |  |  |                |
|                          | FP8                   | EP 0 958 834 A1  | 11/24/1999                     | Meiji Milk Production Co. Ltd.   |  |                |
|                          | FP9                   | WO 00/15665 A2   | 03/23/2000                     | Pedersen, <i>et al.</i>  |  |                |
|                          | FP10                  | EP 1 138 766 A2  | 10/04/2001                     | Toray Industries, Inc.   |  |                |
|                          | FP11                  | WO 01/90747 A2   | 11/29/2001                     | Sunol Molecular Corporation  |  |                |
|                          | FP12                  | WO 03/040299 A2  | 05/15/2003                     | Commissariat a L'Energie<br>Atomique; Sedac Therapeutics                 |  | Abs            |
|                          | FP13                  | WO 2004/094458 A2  | 11/04/2004                     | University of Massachusetts;<br>Massachusetts Institute of<br>Technology |  |                |

827035\_1.DOC

|                    |  |                 |  |
|--------------------|--|-----------------|--|
| Examiner Signature |  | Date Considered |  |
|--------------------|--|-----------------|--|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

|  |   |    |   |                          |                                    |
|--|---|----|---|--------------------------|------------------------------------|
| Substitute for form 1449/PTO   |   |    |   | <b>Complete if Known</b> |                                    |
| <b>FIRST SUPPLEMENTAL<br/>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br>(Use as many sheets as necessary) |   |    |   | Application Number       | 10/782,664                         |
|  |   |    |   | Filing Date              | February 18, 2004                  |
|  |   |    |   | First Named Inventor     | MONTERO-JULIAN, Felix A.           |
|  |   |    |   | Art Unit                 | 1644                               |
|  |   |    |   | Examiner Name            | DIBRINO, Marianne                  |
| Sheet  | 1 | of | 5 | Attorney Docket Number   | 2512.0210001/KWM/C-K<br>(2052-183) |

| NON PATENT LITERATURE DOCUMENTS |                       |   |                |
|---------------------------------|-----------------------|---|----------------|
| Examiner<br>Initials*           | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published  | T <sup>2</sup> |
|                                 | NPL1                  | "2006 Annual Immune Epitope Database and Discovery Workshop Meeting Report Executive Summary," at <i>The Third Annual Immune Epitope Database and Discovery Workshop</i> held on November 7 and 8, 2006 in North Bethesda, Maryland, 3 pages (January 2007)   |                |
|                                 | NPL2                  | Arnold, P.Y., <i>et al.</i> , "The Majority of Immunogenic Epitopes Generate CD4 <sup>+</sup> T Cells That Are Dependent on MHC Class II-Bound Peptide-Flanking Residues," <i>J. Immunol.</i> 169:739-749, The American Association of Immunologists (July 2002)  |                |
|                                 | NPL3                  | Belmares, M.P., <i>et al.</i> , "Structural Factors Contributing to DM Susceptibility of MHC Class II/Peptide Complexes," <i>J. Immunol.</i> 169:5109-5117, The American Association of Immunologists (November 2002)   |                |
|                                 | NPL4                  | Bercovici, N., <i>et al.</i> , "New Methods for Assessing T-Cell Responses," <i>Clin. Diagn. Lab. Immunol.</i> 7:859-864, American Society for Microbiology (2000)  |                |
|                                 | NPL5                  | Boder, E.T., <i>et al.</i> , "Yeast Surface Display of a Noncovalent MHC Class II Heterodimer Complexed with Antigenic Peptide," <i>Dept. Chem. Biomolec. Eng. Depart. Papers (CBE):1-25</i> , University of Pennsylvania (November 2005)   |                |
|                                 | NPL6                  | Bodinier, M., <i>et al.</i> , "Efficient detection and immunomagnetic sorting of specific T cells using multimers of MHC class I and peptide with reduced CD8 binding," <i>Nature Medicine</i> 6:707-710, Nature Publishing Group (2000); "Errata," <i>Nature Medicine</i> 7:129, Nature Publishing Group (2001)                    |                |
|                                 | NPL7                  | Burgess, W.H., <i>et al.</i> , "Possible Dissociation of the Heparin-binding and Mitogenic Activities of Heparin-binding (Acidic Fibroblast) Growth Factor-1 from Its Receptor-binding Activities by Site-directed Mutagenesis of a Single Lysine Residue," <i>J. Cell Biol.</i> 111:2129-2138, Rockefeller University Press (1990) |                |
|                                 | NPL8                  | Buus, S., <i>et al.</i> , "The Relation Between Major Histocompatibility Complex (MHC) Restriction and the Capacity of Ia to Bind Immunogenic Peptides," <i>Science</i> 235:1353-1358, American Association for the Advancement of Science (1987)   |                |
|                                 | NPL9                  | Call, M.E., <i>et al.</i> , "Stoichiometry of the T-cell receptor-CD3 complex and key intermediates assembled in the endoplasmic reticulum," <i>EMBO J.</i> 23:2348-2357, Oxford University Press (June 2004)   |                |
|                                 | NPL10                 | Call, M.E., and Wucherpfennig, K.W., "The T Cell Receptor: Critical Role of the Membrane Environment in Receptor Assembly and Function," <i>Annu. Rev. Immunol.</i> 23:101-125, Annual Reviews (April 2005)   |                |

|                       |  |                    |  |
|-----------------------|--|--------------------|--|
| Examiner<br>Signature |  | Date<br>Considered |  |
|-----------------------|--|--------------------|--|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

|  |   |    |   |                          |                                    |
|--|---|----|---|--------------------------|------------------------------------|
| Substitute for form 1449/PTO   |   |    |   | <b>Complete if Known</b> |                                    |
| <b>FIRST SUPPLEMENTAL<br/>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br>(Use as many sheets as necessary) |   |    |   | Application Number       | 10/782,664                         |
|  |   |    |   | Filing Date              | February 18, 2004                  |
|  |   |    |   | First Named Inventor     | MONTERO-JULIAN, Felix A.           |
|  |   |    |   | Art Unit                 | 1644                               |
|  |   |    |   | Examiner Name            | DIBRINO, Marianne                  |
| Sheet  | 2 | of | 5 | Attorney Docket Number   | 2512.0210001/KWM/C-K<br>(2052-183) |

| NON PATENT LITERATURE DOCUMENTS |                       |  |                |
|---------------------------------|-----------------------|--|----------------|
| Examiner<br>Initials*           | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher, city and/or country where published  | T <sup>2</sup> |
|                                 | NPL11                 | Constantin, C.M., <i>et al.</i> , "Major Histocompatibility Complex (MHC) Tetramer Technology: An Evaluation," <i>Biol. Res. Nurs.</i> 4:115-127, Sage Publications, Inc. (October 2002)   |                |
|                                 | NPL12                 | Dutoit, V., <i>et al.</i> , "Functional Avidity of Tumor Antigen-Specific CTL Recognition Directly Correlates with the Stability of MHC/Peptide Multimer Binding to TCR," <i>J. Immunol.</i> 168:1167-1171, American Association of Immunologists (February 2002)  |                |
|                                 | NPL13                 | Eichmüller, S., <i>et al.</i> , "A new method for double immunolabeling with primary antibodies from identical species," <i>J Immunol. Methods</i> 190:255-265, Elsevier Science Ltd. (1996)   |                |
|                                 | NPL14                 | Flad, T., <i>et al.</i> , "Direct Identification of Major Histocompatibility Complex Class I-bound Tumor-associated Peptide Antigens of a Renal Carcinoma Cell Line by a Novel Mass Spectrometric Method," <i>Cancer Res.</i> 58:5803-5811, American Association for Cancer Research (1998)                  |                |
|                                 | NPL15                 | Garboczi, DN., <i>et al.</i> , "HLA-A2-peptide complexes: refolding and crystallization of molecules expressed in <i>Escherichia coli</i> and complexed with single antigenic peptides," <i>Proc. Natl. Acad. Sci. U.S.A.</i> 89:3429-3433, National Academy of Sciences. (1992)                             |                |
|                                 | NPL16                 | Godkin, A.J., <i>et al.</i> , "Naturally Processed HLA Class II Peptides Reveal Highly Conserved Immunogenic Flanking Region Sequence Preferences that Reflect Antigen Processing Rather than Peptide-MHC Interactions," <i>J. Immunol.</i> 166:6720-6727, American Association of Immunologists (June 2001) |                |
|                                 | NPL17                 | Greten, T.F., and Schneck, J.P., "Development and Use of Multimeric Major Histocompatibility Complex Molecules," <i>Clin. Diagn. Lab. Immunol.</i> 9:216-220, American Society for Microbiology (March 2002)   |                |
|                                 | NPL18                 | Herr, W., <i>et al.</i> , "Detection and quantification of blood-derived CD8 <sup>+</sup> T lymphocytes secreting tumor necrosis factor alpha in response to HLA-A2.1-binding melanoma and viral peptide antigens," <i>J. Immunol. Methods</i> 191:131-142, North-Holland Publishing Co. (1996)              |                |
|                                 | NPL19                 | Herr, W., <i>et al.</i> , "The use of computer-assisted video image analysis for the quantification of CD8 <sup>+</sup> T lymphocytes producing tumor necrosis factor alpha spots in response to peptide antigens," <i>J. Immunol. Methods</i> 203:141-152 North-Holland Publishing Co. (1997)               |                |
|                                 | NPL20                 | Hunt, D.F., <i>et al.</i> , "Characterization of Peptides Bound to the Class I MHC Molecule HLA-A2.1 by Mass Spectrometry," <i>Science</i> 255:1261-1263, American Association for the Advancement of Science (1992)   |                |

|                       |  |                    |  |
|-----------------------|--|--------------------|--|
| Examiner<br>Signature |  | Date<br>Considered |  |
|-----------------------|--|--------------------|--|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

|  |   |    |   |                          |                                    |
|--|---|----|---|--------------------------|------------------------------------|
| Substitute for form 1449/PTO   |   |    |   | <b>Complete if Known</b> |                                    |
| <b>FIRST SUPPLEMENTAL<br/>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br>(Use as many sheets as necessary) |   |    |   | Application Number       | 10/782,664                         |
|  |   |    |   | Filing Date              | February 18, 2004                  |
|  |   |    |   | First Named Inventor     | MONTERO-JULIAN, Felix A.           |
|  |   |    |   | Art Unit                 | 1644                               |
|  |   |    |   | Examiner Name            | DIBRINO, Marianne                  |
| Sheet  | 3 | of | 5 | Attorney Docket Number   | 2512.0210001/KWM/C-K<br>(2052-183) |

| NON PATENT LITERATURE DOCUMENTS |                       |   |                |
|---------------------------------|-----------------------|---|----------------|
| Examiner Initials*              | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher, city and/or country where published         | T <sup>2</sup> |
|                                 | NPL21                 | Jensen, P.E., <i>et al.</i> , "A europium fluoroimmunoassay for measuring peptide binding to MHC class I molecules," <i>J Immunol. Methods</i> 215:71-80, Elsevier Science Ltd. (1998)  |                |
|                                 | NPL22                 | Klein, J., and Sato, A., "The HLA System - Second of Two Parts," <i>N. Engl. J. Med.</i> 343:782-786, Massachusetts Medical Society (September 2000)  |                |
|                                 | NPL23                 | Kozono, H., <i>et al.</i> , "Production of soluble MHC class II proteins with covalently bound single peptides," <i>Nature</i> 369:151-154, Nature Publishing Group (1994)  |                |
|                                 | NPL24                 | Lazar, E., <i>et al.</i> , "Transforming Growth Factor $\alpha$ : Mutation of Aspartic Acid 47 and Leucine 48 Results in Different Biological Activities," <i>Mol. Cell. Biol.</i> 8:1247-1252, American Society for Microbiology (1988)                      |                |
|                                 | NPL25                 | Male, D., "Chapter 2: Antibodies and Antigens," in <i>Immunology: An Illustrated Outline</i> , Bennet, D., ed., Gower Medical Publishing, London, England, p.19-36 (1986)   |                |
|                                 | NPL26                 | Marin, M., <i>et al.</i> , "Cloning and Expression of a Single-Chain Antibody Fragment Specific for a Monomorphic Determinant of Class I Molecules of the Human Major Histocompatibility Complex," <i>Hybridoma</i> 14:443-451, Mary Ann Liebert, Inc. (1995) |                |
|                                 | NPL27                 | McMichael, A.J., and Kelleher, A., "The arrival of HLA class II tetramers," <i>J. Clin. Invest.</i> 104:1669-1670, American Society for Clinical Investigation (1999)   |                |
|                                 | NPL28                 | Merriam Webster OnLine Dictionary definition for the term "reconstitute"  |                |
|                                 | NPL29                 | Miller, J.E.W., <i>et al.</i> , "Rapid Determination of Class I Peptide Binding Motifs Using Codon-based Random Peptide Phage Display Libraries," <i>J. Cell. Biochem. Supp.</i> 8D:292, V116, Wiley-Liss (1994)  |                |
|                                 | NPL30                 | Nepom, G.T., <i>et al.</i> , "HLA Class II Tetramers: Tools for Direct Analysis of Antigen-Specific CD <sup>+</sup> T Cells," <i>Arthritis Rheum.</i> 46:5-12, Wiley-Liss, Inc. (January 2002)  |                |

|                    |                 |
|--------------------|-----------------|
| Examiner Signature | Date Considered |
|--------------------|-----------------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

|  |   |    |   |                          |                                    |
|--|---|----|---|--------------------------|------------------------------------|
| Substitute for form 1449/PTO   |   |    |   | <b>Complete if Known</b> |                                    |
| <b>FIRST SUPPLEMENTAL<br/>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br>(Use as many sheets as necessary) |   |    |   | Application Number       | 10/782,664                         |
|  |   |    |   | Filing Date              | February 18, 2004                  |
|  |   |    |   | First Named Inventor     | MONTERO-JULIAN, Felix A.           |
|  |   |    |   | Art Unit                 | 1644                               |
|  |   |    |   | Examiner Name            | DIBRINO, Marianne                  |
| Sheet  | 4 | of | 5 | Attorney Docket Number   | 2512.0210001/KWM/C-K<br>(2052-183) |

| NON PATENT LITERATURE DOCUMENTS |                       |   |                |
|---------------------------------|-----------------------|---|----------------|
| Examiner Initials*              | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher, city and/or country where published                             | T <sup>2</sup> |
|                                 | NPL31                 | Ogg, G.S., and McMichael, A.J., "HLA-peptide tetrameric complexes," <i>Curr. Opin. Immunol.</i> 10:393-396, Current Biology Publications (1998)   |                |
|                                 | NPL32                 | Plytycz, B. and Seljelid, R., "MHC Molecules and Lymphocytes: Evolutionary Perspective," <i>Archivum Immunologiae et Therapiae Experimentalis</i> 46:137-142, Birkhäuser (1998)   |                |
|                                 | NPL33                 | Reichstetter, S., <i>et al.</i> , "Distinct T Cell Interactions with HLA Class II Tetramers Characterize a Spectrum of TCR Affinities in the Human Antigen-Specific T Cell Response," <i>J. Immunol.</i> 165:6994-6998, The American Association of Immunologists (December 2000) |                |
|                                 | NPL34                 | Roitt, I.M., <i>et al.</i> , "Structure In Relation to Function," in <i>Immunology</i> , Gower Medical Publishing, London, page 5.7 (1985)  |                |
|                                 | NPL35                 | Rötzschke, O., <i>et al.</i> , "Conformational variants of class II MHC/peptide complexes induced by N- and C-terminal extensions of minimal peptide epitopes," <i>Proc. Natl. Acad. Sci. USA</i> 96:7445-7450, National Academy of Sciences (1999)                               |                |
|                                 | NPL36                 | Sadegh-Nasseri, S., and McConnell, H.M., "A kinetic intermediate in the reaction of an antigenic peptide and I-E <sup>k</sup> ," <i>Nature</i> 337:274-276, Nature Publishing Group (1989)  |                |
|                                 | NPL37                 | Seffernick, J.F., <i>et al.</i> , "Melamine Deaminase and Atrazine Chlorohydrolase: 98 Percent Identical but Functionally Different," <i>J. Bacteriology</i> 183:2405-2410, American Society for Microbiology (2001)  |                |
|                                 | NPL38                 | Sliz, P., <i>et al.</i> , "Crystal Structures of Two Closely Related but Antigenically Distinct HLA-A2/Melanocyte-Melanoma Tumor-Antigen Peptide Complexes," <i>J. Immunol.</i> 167:3276-3284, The American Association of Immunologists (September 2001)                         |                |
|                                 | NPL39                 | Sørensen, A.L., <i>et al.</i> , "Purification and Characterization of a Low-Molecular-Mass T-Cell Antigen Secreted by <i>Mycobacterium tuberculosis</i> ," <i>Infect. Immun.</i> 63:1710-1717, American Society For Microbiology (1995)   |                |
|                                 | NPL40                 | Stone, J.D., <i>et al.</i> , "T-Cell Activation by Soluble MHC Oligomers Can Be Described by a Two-Parameter Binding Model," <i>Biophys. J.</i> 81:2547-2557, Biophysical Society (November 2001)   |                |

|                    |                 |
|--------------------|-----------------|
| Examiner Signature | Date Considered |
|--------------------|-----------------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

|  |   |    |   |                          |                                    |
|--|---|----|---|--------------------------|------------------------------------|
| Substitute for form 1449/PTO   |   |    |   | <b>Complete if Known</b> |                                    |
| <b>FIRST SUPPLEMENTAL<br/>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br>(Use as many sheets as necessary) |   |    |   | Application Number       | 10/782,664                         |
|  |   |    |   | Filing Date              | February 18, 2004                  |
|  |   |    |   | First Named Inventor     | MONTERO-JULIAN, Felix A.           |
|  |   |    |   | Art Unit                 | 1644                               |
|  |   |    |   | Examiner Name            | DIBRINO, Marianne                  |
| Sheet  | 5 | of | 5 | Attorney Docket Number   | 2512.0210001/KWM/C-K<br>(2052-183) |

| NON PATENT LITERATURE DOCUMENTS |                       |   |                |
|---------------------------------|-----------------------|---|----------------|
| Examiner<br>Initials*           | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher, city and/or country where published   | T <sup>2</sup> |
|                                 | NPL41                 | Sugita, M., <i>et al.</i> , " Assembly and Retention of CD1b Heavy Chains in the Endoplasmic Reticulum," <i>J. Immunol.</i> 159:2358-2365, American Association of Immunologists, Inc. (1997)   |                |
|                                 | NPL42                 | Sylvester-Hvid, C., <i>et al.</i> , " Establishment of a quantitative ELISA capable of determining peptide – MHC class I interaction," <i>Tissue Antigens</i> 59:251-258, Blackwell Synergy (2002)  |                |
|                                 | NPL43                 | Tao, M.H., and Morrison, S.L., "Studies of Aglycosylated Chimeric Mouse-Human IgG. Role of Carbohydrate in the Structure and Effector Functions Mediated by the Human IgG Constant Region," <i>J. Immunol.</i> 143:2595-2601, American Association of Immunologists (1989)  |                |
|                                 | NPL44                 | Tissot, A.C., <i>et al.</i> , " Characterizing the functionality of recombinant T-cell receptors in vitro: a pMHC tetramer based approach," <i>J Immunol. Methods</i> 236:147-165, Elsevier Science Ltd. (2000)   |                |
|                                 | NPL45                 | Tompkins, S.M., <i>et al.</i> , " A europium fluoroimmunoassay for measuring binding of antigen to class II MHC glycoproteins," <i>J Immunol. Methods</i> 163:209-216, Elsevier Science Ltd. (1993)   |                |
|                                 | NPL46                 | Wells, J.A., "Additivity of Mutational Effects in Proteins," <i>Biochem.</i> 29:8509-8517, American Chemical Society (1990)   |                |
|                                 | NPL47                 | Welsh, R.M., "Assessing CD8 T Cell Number and Dysfunction in the Presence of Antigen," <i>J. Exp. Med.</i> 193:F19-F22, The Rockefeller University Press (March 2001)   |                |
|                                 | NPL48                 | Woll, M.M., <i>et al.</i> , "Direct Measurement of Peptide-Specific CD8 <sup>+</sup> T cells Using HLA-A2:Ig Dimer for Monitoring the <i>In Vivo</i> Immune Response to a HER2/neu Vaccine in Breast and Prostate Cancer Patients," <i>J. Clin. Invest.</i> 24:449-461, American Society for Clinical Investigation (July 2004) |                |
|                                 | NPL49                 | Zarutskie, J.A., <i>et al.</i> , "A Conformational Change in the Human Major Histocompatibility Complex Protein HLA-DR1 Induced by Peptide Binding," <i>Biochemistry</i> 38:5878-5887, American Chemical Society (1999)   |                |

827037\_1.DOC

|                       |  |                    |  |
|-----------------------|--|--------------------|--|
| Examiner<br>Signature |  | Date<br>Considered |  |
|-----------------------|--|--------------------|--|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.